

Date: Monday, 11/21/2005 2:10:08 PM
User: Linda Lacelle

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : WEARSHOE
Job Number : 24863	
Estimate Number : 10846	
P.O. Number : N/A	Part Number : D32873
This Issue : 11/21/2005 S.O. No. : N/A	Drawing Number : D3287 REV B
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A Type : PURCHASED PARTS	Drawing Revision : B
Previous Run : N/A	Material : N/A
Written By : <u>SEE COMMENT BELOW</u>	Due Date : 11/28/2005 Qty: 20 Um: Each
Checked & Approved By : <u>SEE COMMENT BELOW</u>	
Comment : Est: B 05.10.03 Step 7 added KJ/JLM	

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	PG	PURCHASING
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Comment: PURCHASING

Issue P/O: 146

Email or ship DXF file to vendor

Laser Cut D3287-3 Flat pattern as per Dwg D3287

Material release note required

2.0	D32873F	WEARPLATE FLAT
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Comment: Qty.: 1.0000 Each(s)/Unit Total : 20.0000 Each(s)
WEARPLATE FLAT

3.0	PACKAGING 1	PACKAGING RESOURCE #1
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Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material release note is attached

4.0	QC6	DIMENSIONAL CHECK
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Comment: DIMENSIONAL CHECK

Inspect dimensions as per template D3287-3 T1

5.0	BRAKE NC	NC BRAKE
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Comment: NC BRAKE

Deburr if necessary

Form on Brake as per Dwg D3287 using Jigs DT8261 and DT8326.

Identify as D3287-3

Form Joggle on brake using Jig DT8158 as per Dwg D3287

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
06-01-11	4	Took 1 for template. Identify AS DT 8838 permanent change.	<i>[Signature]</i>	06-01-11	1	<i>[Signature]</i> 06-01-11	<i>[Signature]</i> 06-01-11

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: *[Signature]* Date: 06/02/13
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 11/21/2005 2:10:08 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARSHOE

Job Number: 24863

Part Number: D32873

Job Number:



Seq. #: Machine Or Operation: Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



26-01-28

15

Comment: INSPECT WORK TO CURRENT STEP

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref. 4.3.5.6) as per QSI 005 4.3

26-02-09

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

FC 06 02 10

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *FP*

FC 06 02 10

10.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

Sut 06/02/10

19

06/02/13

Job Completion



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Nov 17, 2005
03:30 pm

Work Order No	:	0024863	Department Code:	
Project Name	:	D3287-3	Burden Flags	: NNNNNNN
Project For	:	WK550	WO Status	: Open
Work Order Type	:	Main	Invoice State	: Not Invoiced
Main WO Number	:		Invoice Date	:
House Part Number	:	D3287-3	Invoice Number	:
Description	:	Wearshoe	Invoice Amount	: 0.00
Manufactured	:	No	Order Entry No	:
Amount Req'd	:	0	OE Value	: 0.00
Amount Done	:	0	Est Margin	: 0.000%
Start Date	:	11-17-05	Actual Margin	: 0.000%
Est Finish Date	:			
Act Finish Date	:			
Drawings Req'd	:	No		
Ok for Approval	:			
Approval Rec'd	:			

\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost	0.00	0.00	0.00	0.00	0.00
Engineering Hours	0.00	0.00	0.00		
Engineering Cost	0.00	0.00	0.00	0.00	0.00
Production Hours	0.00	0.00	0.00		
Production Cost	0.00	0.00	0.00	0.00	0.00
Packaging Hours	0.00	0.00	0.00		
Packaging Cost	0.00	0.00	0.00	0.00	0.00
OverHead Hours	0.00	0.00	0.00		
OverHead Cost	0.00	0.00	0.00	0.00	0.00
CNC Hours	0.00	0.00	0.00		
CNC	0.00	0.00	0.00	0.00	0.00
Misc. Hours	0.00	0.00	0.00		
Misc.	0.00	0.00	0.00	0.00	0.00
Burden	0.00	0.00	0.00		
Total Cost	0.00	0.00	0.00		
Margin	0.000	0.000			
Selling Cost	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done	0.00	0.00
Profits/(Loss)	0.00	0.00



New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephones: (09) 375 8999 / 375 8111 Auckland
(09) 375 8088 / 375 3535 Waiuku
Fax: (09) 375 8950

TEST CERTIFICATE

Ref: 537923850

Reissued 22/8/2005

CUSTOMER	Wilkinson	P5C505DI002	SPECIFICATION	ASTMA1008 CS Type A	CERTIFICATE No	TC116858																			
CUSTOMER ON	98-21N-742		PRODUCT	CRA WIDE COIL	PAGE	1 of 1																			
MILL ON	486968		DIMENSIONS	0.033" x 48" x Coil	DATE	19 August 2005																			
PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT													MECHANICAL TESTS (TEST SPECIFICATION - ASTMA370)										
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ()	BEND	YIELD	T.S.	%ELONG	HARDNESS	r	LENGTH	
		x100				x1000									x10000	x100	180°								
R9-466089-00	845423	6	TR	21	11	16	17	20	16	2	3	1	3					Good				50		2700	
R9-466081-00	845423	6	TR	21	11	16	17	20	16	2	3	1	3					Good				50		2700	
R9-466082-00	845253	6	1	21	10	12	28	30	15	2	3	1	3					Good				47		2651	
R9-466083-00	845253	6	1	21	10	12	28	30	15	2	3	1	3					Good				47		2651	

16.01.11

YIELD	GAUGE LENGTH (G.L.)	PLASTIC STRAIN RATIO (r)	IMPACT TEST	CARBON EQUIVALENT VALUE (CE)
(A)=0.2% PROOF STRESS	(A)=200mm (C)=80mm (E)=2"	(A)=0 (C)=r45	(A)=5mm x 5mm	(A)=C+Mn/8
(B)=LOWER YIELD STRESS	(B)=50mm (D)=5.65 x 50 (F)=8"	(B)=80 (D)=(C+r90+2r45) / 4	(A)=10mm x 10mm (D)=2.5mm x 10mm	(C)=C+Mn/8+Si/24
			(B)=7.5mm x 10mm (E)=5mm x 10mm	(D)=
				(B)=C+Mn/8+(Cr+V+Mo)/5+(Cu+Ni)/15

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Satish Misra*
QC METALLURGIST

20 gms

PO# 267, 146

INSPECTION CERTIFICATE

MATERIAL TEST/INSPECTION CERTIFICATES

90229754

YEN MAU CORP.
YEN MAU CORP.

INVOICE NO.
COMMODITY:

FOURAGE
PRIME COLD ROLLED STAINLESS STEEL SHEET AISI 304NO.4 (SIC)
FINISH WITH 100 MIC. FILM ON MAIN SIDE, WITH BACK-PASS,
SLITTED EDGE AISI 304, 2B FINISH, WITH PAPER INTERLEAVED,
SLITTED EDGE.
AISI 304

SPECIFICATION:
CUSTOMER:

INTEGRIS METALS LTD

工廠: 嘉里基港竹園路345號
345, SHUN AN RD. LI CHU HSANG
KACHING TAIWAN R.O.C.
TEL: (87) 8722185 FAX: (87) 8773006
CERTIFICATE NO: 2611192
DATE OF ISSUE: 1/12/2004

SPECIFICATION: CUSTOMER :		ASIS 304 INTEGRIS METALS LTD				Physical Properties Tensile Test GL-50 mm					Chemical Composition (%)								
(ITEM NO) SIZE	NO.	Weight (N.W.)		Heat No.	ID NO.	Y.S. (N/mm ²)	T.S. (N/mm ²)	E.L. (%)	HRB	HV	C x100	Si x100	Mn x100	P x100	S x100	NE x100	Cr x100	N x100	
		KGS	LBS																
ASIS 304 2B (7425-4228)																			
24GA/48"X120"	1	1,465	3,230	YU231320	3AS44463B-21	258	685	56	81	166	4.8	51	119	24	2	804	1821	2.7	
24GA/48"X120"	1	1,464	3,228	YU231320	3AS44463B-22	258	685	56	81	156	4.8	51	119	24	2	804	1821	2.7	
22GA/48"X96"	1	1,464	3,228	YU230510	38S37600B-61	280	673	53	82	162	5.4	50	126	26	3	815	1819	2.4	
22GA/48"X120"	1	1,375	3,031	YU230510	38S37600B-52	280	673	53	82	162	5.4	50	126	26	3	815	1819	2.4	
22GA/48"X120"	1	1,445	3,186	YU134975	3AS43434A-1	312	866	61	82	161	4.1	49	112	24	2	809	1821	2.8	
18GA/48"X96"	1	1,497	3,300	YU231066	3AS42732-4	301	684	49	84	166	3.7	40	116	27	5	810	1824	3.7	
18GA/48"X96"	1	1,453	3,203	YU231066	3AS42732-5	301	684	49	84	166	3.7	40	116	27	5	810	1824	3.7	
18GA/48"X120"	1	1,455	3,206	YU231066	3AS42732-6	301	684	49	84	166	3.7	40	116	27	5	810	1824	3.7	
16GA/48"X120"	1	1,423	3,137	YU231143	3AS42886A-6	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7	
16GA/48"X120"	1	1,424	3,139	YU231143	3AS42886A-7	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7	
16GA/48"X120"	1	1,420	3,131	YU231143	3AS42886B-1	302	650	53	82	159	4.5	52	123	28	4	810	1822	2.7	
14GA/48"X96"	1	1,441	3,177	YU231075	3AS42917A-1	302	650	52	83	162	4.2	48	119	26	6	806	1813	3.4	
14GA/48"X96"	1	1,441	3,177	YU231075	3AS42917A-2	302	650	52	83	162	4.2	48	119	26	6	806	1813	3.4	
14GA/48"X120"	1	1,420	3,131	YU231075	3AS42917A-3	302	650	52	83	162	4.2	48	119	26	6	806	1813	3.4	
14GA/48"X120"	1	1,420	3,131	YU231075	3AS42917A-4	302	650	52	83	162	4.2	48	119	26	6	806	1813	3.4	
14GA/60"X96"	1	1,446	3,188	YU135202	3AS45623A-211	301	641	53	81	157	5.1	51	114	30	9	806	1822	3	
14GA/60"X120"	1	1,405	3,097	YU135202	3AS45623A-213	301	641	53	81	157	5.1	51	114	30	9	806	1822	3	
14GA/60"X120"	1	1,540	3,395	YU135202	3AS45623A-214	301	641	53	81	157	5.1	51	114	30	9	806	1822	3	
18		25,998	57,317	Grand total for all Heat NO.															

NO MERCURY CONTAMINATION
WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS
BEEN MADE IN ACCORDANCE WITH THE RULES OF THE MILL CERTIFICATE.

PRODUCT IN ACCORDANCE WITH ASTM A240, A480,
A362E, ASME SA240, Q35765D.

YEN MAU CORP.

in Van Hui
Manager of Quality Assurance/Inspection

2094 304 0455
(0.037)

PO # 267 196



New Zealand Steel Limited
Glenbrook, South Auckland
Postal: Private Bag 92121, Auckland, New Zealand
Telephones: (09) 375 8998 / 375 8111 Auckland
(09) 235 8088 / 235 3535 Wairakei
Fax: (09) 375 8859

TEST CERTIFICATE

Ref: 521022495

CUSTOMER	Wilkinson	SPECIFICATION	ASTMA1808 CS Type A	CERTIFICATE No	TC112397
CUSTOMER O/N	90-21N-686	PRODUCT	CRA WIDE COIL	PAGE	1 of 1
MILL O/N	480737	DIMENSIONS	0.055" x 48" x Coil	DATE	09 June 2005

PACK NUMBER	HEAT No	CHEMICAL COMPOSITION PERCENT																MECHANICAL TESTS (TEST SPECIFICATION - ASTM A370)						
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Ti	Al	B	N2	CE ()	BEND	YIELD	T.S.	%ELONG G.L.=	HARDNESS HRB	r ()	LENGTH (feet)
		x100			x1000										x10000		x100	180°						
R9-459713-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				54		1585
R9-459714-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				54		1457
R9-459715-00	641513	5	TR	18	9	18	12	17	15	1	6	1	1					Good				48		1375
R9-459716-00	641513	5	TR	18	9	18	12	17	15	1	6	1	1					Good				48		1473
R9-459717-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				48		1631
R9-459718-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				48		1093
R9-459719-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				50		1562
R9-459720-00	641756	5	TR	20	12	19	12	18	19	1	7	1	1					Good				50		1535
R9-460380-00	641761	4	TR	20	13	17	12	18	25	5	8	1	1					Good				50		1581
R9-460381-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				49		1562
R9-460382-00	641758	4	TR	18	4	16	13	19	10	5	3	1	1					Good				49		1503
R9-461458-00	642309	2	TR	18	10	20	11	17	19	1	6	1	1					Good				48		1785

YIELD (A)=0.2% PROOF STRESS (B)=LOWER YIELD STRESS	GAUGE LENGTH (G.L.) (A)=200mm (C)=80mm (E)=2" (B)=50mm (D)=5.65? So (F)=8"	PLASTIC STRAIN RATIO (r) (A)=r0 (C)=r45 (B)=r90 (D)=(r0+r90+2r45)/4	IMPACT TEST (A)=10mm x 10mm (B)=7.5mm x 10mm (C)=5mm x 5mm (D)=2.5mm x 10mm (E)=5mm x 10mm	CARBON EQUIVALENT VALUE (CE) (A)=C+Mn/8 (B)=C+Mn/8+(Cr+V+Mo)/5+(Cu+Ni)/15 (C)=C+Mn/6+Si/24 (D)=
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WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Datish Misra*
QC METALLURGIST

16 ga ms

POA 146, 267, 245,